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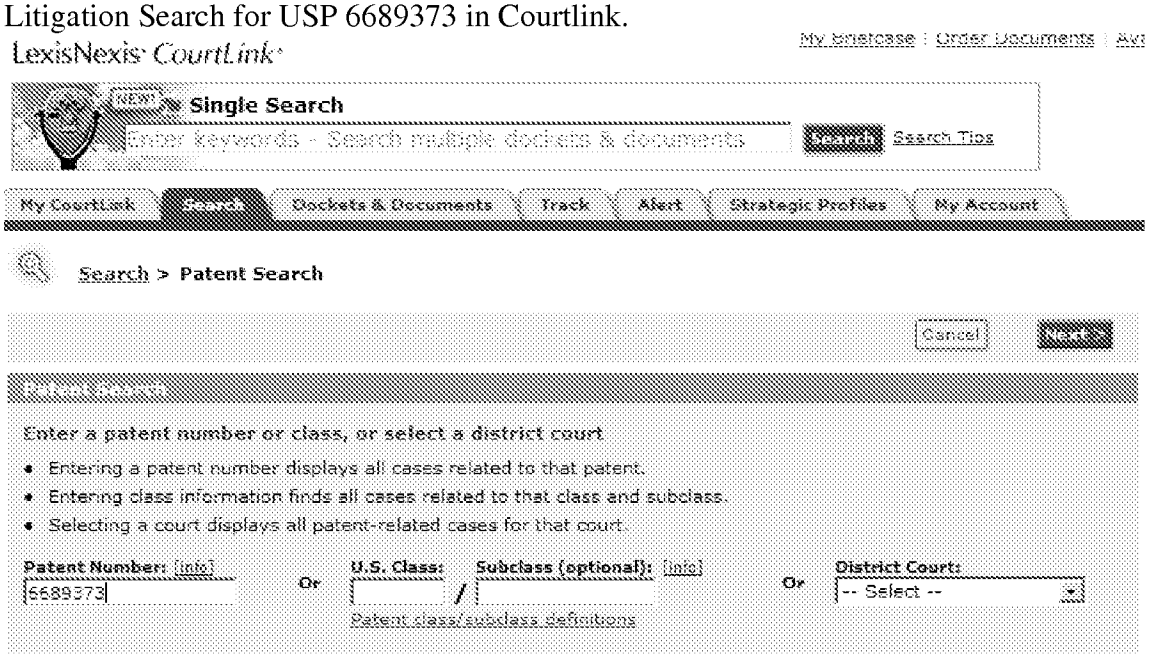

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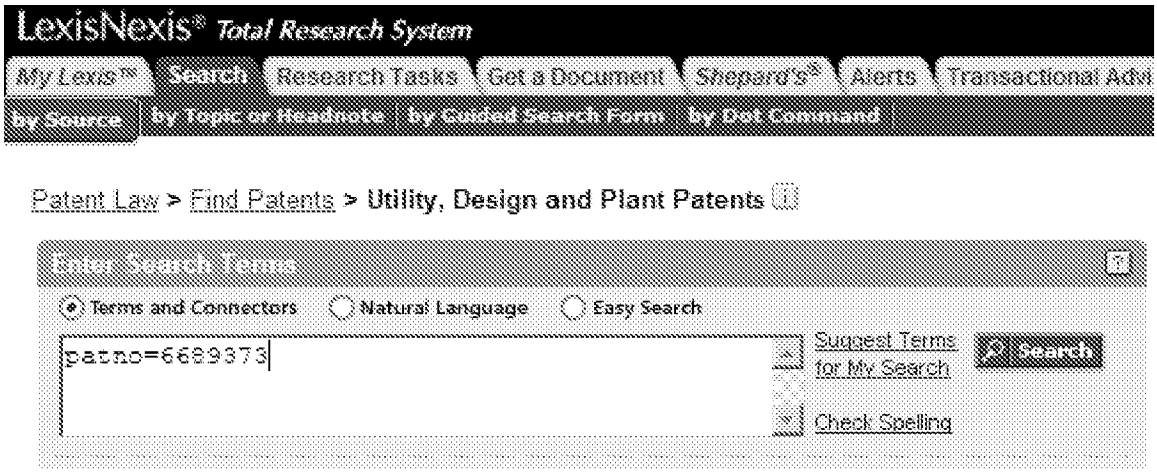

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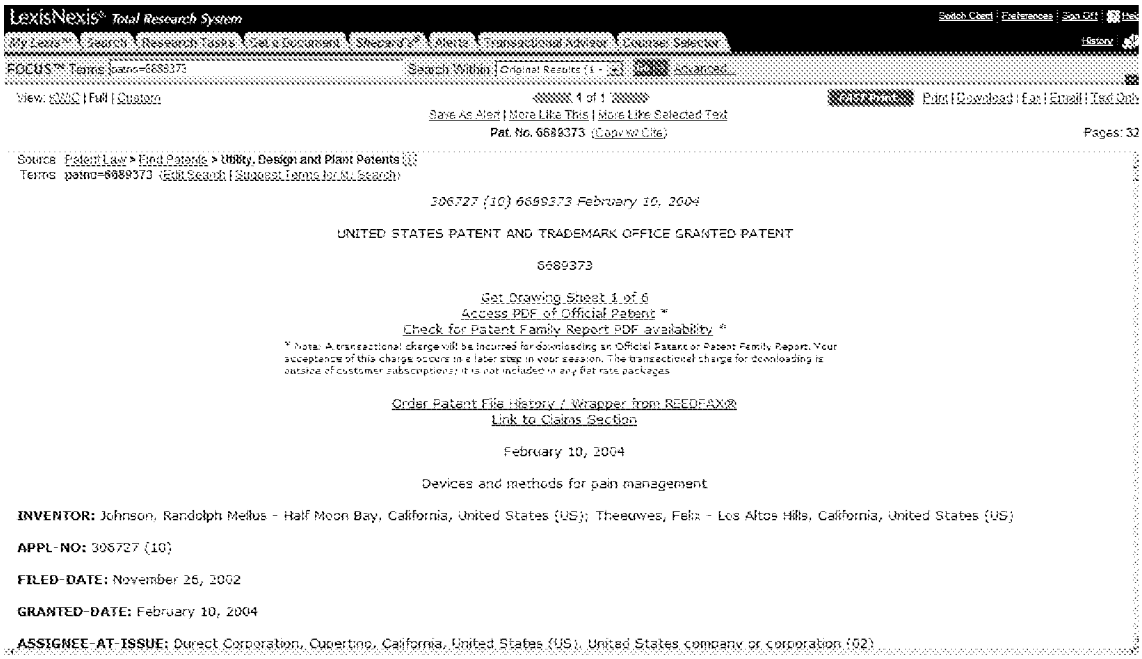
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Link to Claims Section

February 10, 2004

Devices and methods for pain management

INVENTOR: Johnson, Randolph Mellus - Half Moon Bay, California, United States (US); Theeuwes, Felix - Los Altos Hills, California, United States (US)

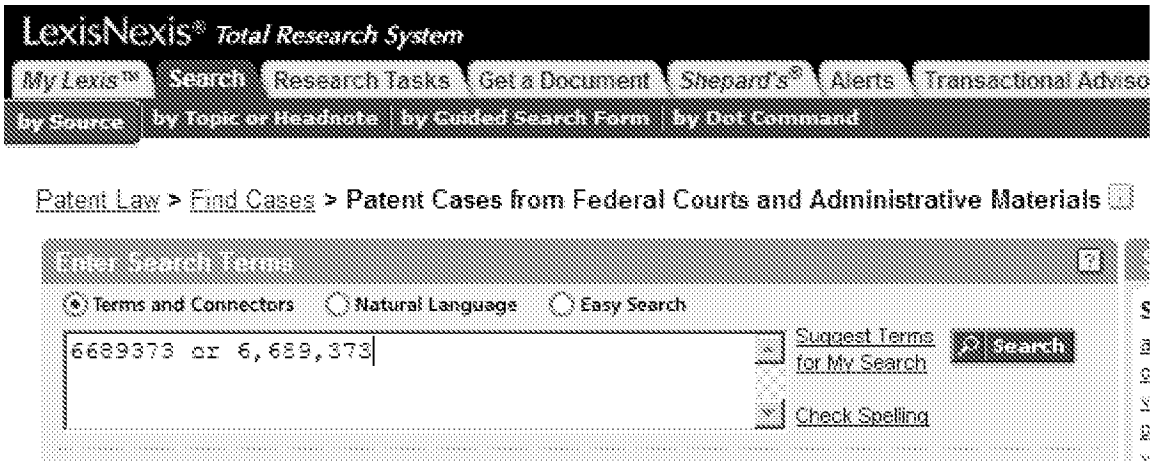
APPL-NO: 306727 (10)

FILED-DATE: November 26, 2002

GRANTED-DATE: February 10, 2004

ASSIGNEE-AT-ISSUE: Durect Corporation, Cupertino, California, United States (US), United States company or corporation (02)

Lexis lists litigation at the top of its patents: No litigation listed.



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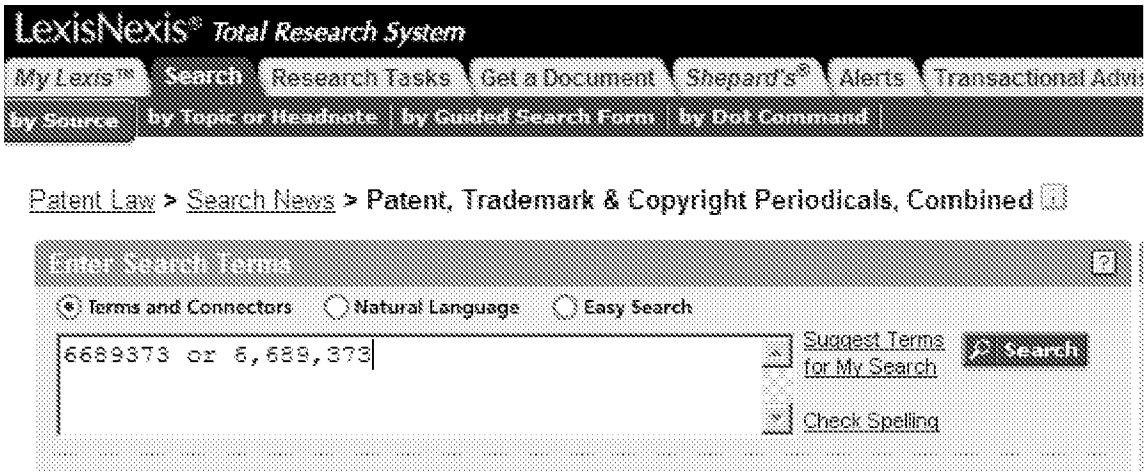

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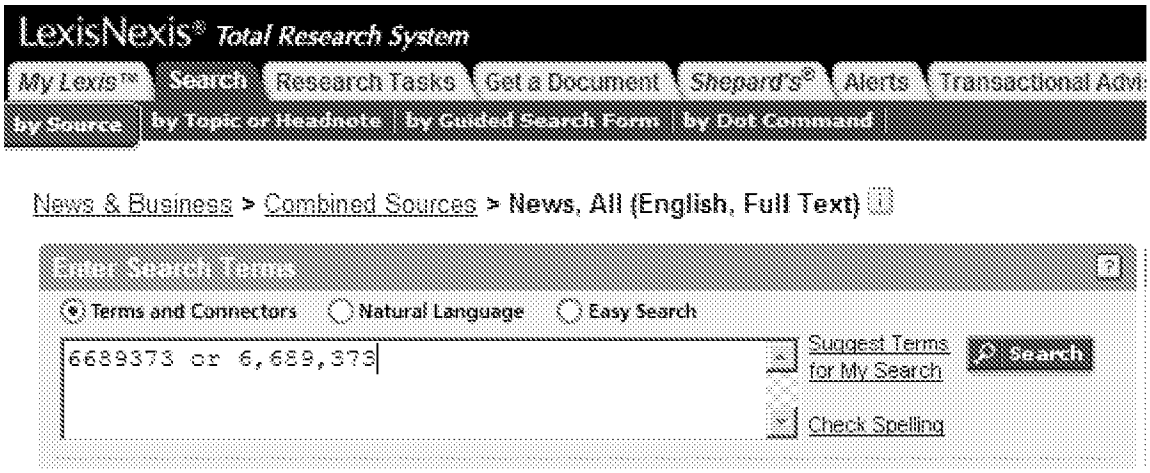

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Patent Number :
  US2003171401 A1 20030911 [US20030171401]
Patent Number 2 :
  US6689373 B2 20040210 [US6689373]
Title :
  (A1) Devices and methods for pain management
Patent Assignee :
  (B2) DURECT CORP (US)
Patent Assignee :
  Durect Corporation, Cupertino CA [US]
Patent Assignee 2 :
  (B2) DURECT CORP (US)
Inventor(s) :
  (A1) JOHNSON RANDOLPH MELLUS (US); THEEUWES FELIX (US)
Application Nbr :
  US30672702 20021126 [2002US-0306727]
Filing Details :
  Cont. of US09522535 20000310 [2000US-0522535]
  Prov. AP US60125589 19990318 [1999US-P125589]
  Continuation of: US6541021
Priority Details :
  US30672702 20021126 [2002US-0306727]
  US52253500 20000310 [2000US-0522535]
  US12558999P 19990318 [1999US-P125589]
Intl Patent Class :
  (A1) A61K-009/22 A61K-031/445
IPC Advanced All :
  A61K-009/00 [2006-01 A - I R M EP]; A61K-009/22 [2006-01 A - I R M US];
  A61K-031/4468 [2006-01 A - I R M EP]; A61K-031/4535 [2006-01 A - I R M
  EP]; A61K-047/10 [2006-01 A - I R M EP]; A61K-047/14 [2006-01 A - I R
  M EP]; A61K-047/26 [2006-01 A - I R M EP]
IPC Core All :
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  A61K-031/4468 [2006 C - I R M EP]; A61K-031/4523 [2006 C - I R M EP];
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EPO ECLA Class :
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  A61K-047/26
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Document Type :
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Publication Stage :
(A1) Utility Patent Application published on or after January 2, 2001
Publication Stage 2 :
(B2) U.S. Patent (with pre-grant pub.) after Jan. 2, 2001

Abstract :
The invention features devices and methods for the systemic delivery of fentanyl or a fentanyl congener (e.g., sufentanil) to treat pain. In the present invention, a drug formulation comprising fentanyl or a fentanyl congener is stored within a drug delivery device (e.g., contained in a reservoir or impregnated within a matrix within the controlled drug delivery device). The drug formulation comprises an amount of drug sufficient for treatment and is stable at body temperatures (i.e., no unacceptable degradation) for the entire pre-selected treatment period. The drug delivery devices store the drug formulation safely (e.g., without dose dumping), provide sufficient protection from bodily processes to prevent unacceptable degradation of the formulation, and release the drug formulation in a controlled fashion at a therapeutically effective rate to treat pain. In use, the drug delivery device is implanted in the subject's body at an implantation site, and the drug formulation is released from the drug delivery device to a delivery site. The delivery site may be the same as, near, or distant from the implantation site. Once released at the delivery site, the drug formulation enters the systemic circulation and is transported to the site of action in the body to modulate the pain response (e.g., the brain or other pain sensory location).

Update Code :
2003-49